

SOME TOPICS ON NON-RAMSEY CONNECTION OF COMBINATORICS AND ULTRAFILTERS

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In this talk we shall concentrate on examples where the ultrafilters themselves or their idea was an inspiration to combinatorial statements.

This area is of course very much connected with Ramsey theory which seems to be a perfect fit for the intuitive idea of “largeness” as postulated by an ultrafilter.

We aim to give further examples of ultrafilters in other combinatorial context. These include:

- combinatorial background of 3-set theorem;
- finite “miniaturization” of ultrafilters (B-property, Chvatal and Frankl problems);
- projectivity;
- limit objects (universal and converging sequences).

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